

## REMARKS

The Office Action of June 6, 2008, has been carefully reviewed, and in view of the above amendments and the following remarks, reconsideration and allowance of the pending claims are respectfully requested.

In the above Office Action, claims 1, 2, 4, 5, 10, 12-14 and 26-32 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Skujins et al.* (U.S. Patent Publication No. 2003/0069520). Claims 3, 6-9, 11 and 15-25 stand withdrawn as being directed to a non-elected species.

At the outset, the undersigned counsel for Applicants would like to express her gratitude to Examiner Hoekstra for the courtesies extended during the personal interview conducted on September 8, 2008. During said interview, the applied references and a proposed claim amendment were discussed. The Examiner indicated that the proposed claim amendments appeared to overcome the current rejections. Independent claims 1, 12, 13 and 14 have been amended in accordance with the interview proposal.

The primary reference upon which the Examiner relies, *Skujins*, discloses various embodiments for connecting different guidewire sections together. The embodiment of Figures 1-3 to which the Examiner refers discloses proximal and distal guidewire sections 14, 16 joined together by a connector tube 18. The Examiner appears to rely upon the surface contact of guidewire sections 14, 16 at overlapping joint 12 to meet the recited language of the claims. Applicants respectfully disagree with this interpretation.

The guide wire of claims 1, 13 and 14 has an integral intermediate portion provided between said distal end side portion and said proximal end side portion

which is formed of a metallic material mixture of said first metallic material and said second metallic material, or which has an integral portion formed of a metallic material mixture containing said first metallic material and said second metallic material. As amended above to clarify the invention of claims 1, 13 and 14, said intermediate portion comprises an integral gradient composition portion or integral portion having a predetermined length in which a weight ratio of said first metallic material in the metallic material mixture decreases and a weight ratio of said second metallic material in the metallic material mixture increases from the distal end side portion toward the proximal end side portion. The overlapping joint 12 does not define an integral gradient composition portion or integral portion comprising a mixture of metallic materials, as recited in claims 1, 13 and 14. The connector 18 or connector material 19 disclosed in *Skujins* comprises an alloy material made of a mixture of materials, but the mixture is uniform in composition and does not disclose or suggest the gradient composition specifically recited in claims 1, 13 and 14.

Claim 12 similarly recites that said intermediate portion comprises a sintered cylindrical body formed of a powder of the first metallic material and a powder of the second metallic material and that the intermediate portion comprises a gradient composition portion having a predetermined length in which a weight ratio of said first metallic material in the metallic material mixture decreases from the distal end side portion toward the proximal end side portion, a distal end of said intermediate portion is formed of said first metallic material. As stated above, Applicants respectfully contend that the overlapping joint 12 does not define a sintered cylindrical body or a gradient composition portion comprising a mixture of metallic materials, as recited in claim 12. The connector 18 or connector material 19

disclosed in *Skujins* comprises an alloy material made of a mixture of materials, but the mixture is uniform in composition and does not disclose or suggest the gradient composition specifically recited in claim 12.

Claim 1 further recites that the distal end of said intermediate portion is joined to a terminal end of said proximal end of said distal end side portion and said proximal end of said intermediate portion is joined to a terminal end of said distal end of said proximal end side portion. Claims 13 and 14 similarly recite that the distal end of said intermediate portion is joined to said distal end side portion and said proximal end of said intermediate portion is joined to said proximal end side portion. Thus, as claimed, said proximal end of said distal end side portion and said distal end of said proximal end side portion do not overlap. The surface contact of guidewire sections 14, 16 at overlapping joint 12 in *Skujins* clearly does not meet this recitation of claims 1, 13 and 14.

Contrary to the claimed invention which uses a metallic material mixture to obtain the desired change in flexural rigidity, the cited prior art overlaps the ends of the proximal and distal guidewire sections and utilizes a connector formed of a metallic alloy to join the same in the overlapping configuration. Accordingly, Applicants contend claims 1, 12, 13 and 14 are not anticipated by *Skujins*.

Although not applied against the pending claims, the Examiner also notes that *Ishida* (U.S. Patent No. 6,328,822) is of interest. *Ishida* merely discloses that conventional graded metallic materials having gradually changing mixing ratios have been produced by mixing different material powders at gradually changing mixing ratios to prepare a plurality of mixed powder sheets having gradually changing mixing ratios, laminating the mixed powder sheets along the gradually changing

mixing ratios, compacting and sintering them. *Ishida* further notes that functionally graded materials produced by such a method cannot be rolled or drawn, and they can be formed to desired shapes only by cutting. Thus, they are not only very expensive but also cannot be formed into complicated shapes. *Ishida* does not disclose or suggest providing a functionally graded material as an intermediate portion between two materials such as stainless steels and nickel-titanium alloys. Accordingly, it would not be obvious to one skilled in the art to apply the teaching of *Ishida* to the connection portion of a guide wire, such as that of *Skujins et al.*

### CONCLUSION

In view of the above amendments and remarks, Applicants respectfully submit that the claims of the present application are now in condition for allowance, and an early indication of the same is earnestly solicited.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference would be helpful in resolving any remaining issues pertaining to this application; the Examiner is kindly invited to call the undersigned counsel for Applicants regarding the same.

Respectfully submitted,

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